



ZS70-PE Screw Clamp Terminal Block

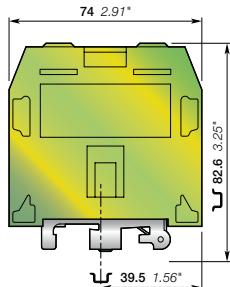
Ground



70 mm²
00 AWG

22 mm 0.866 in Spacing

Features and Benefits



Reliable electrical and mechanical contact with the rail that exceeds the requirements of IEC 60947-7-2 terminal block standard.

3D CAD outline drawings available on "Control Product 3D" portal

Ordering Details	Type	Order Code	EAN Code	Pack ^(ing)	Weight g (1 pce)
Green-Yellow	ZS70-PE	1SNK 522 150 R0000	3472595221509	10	222.00

Declarations and Certificates

Document Part Number

Explosive Atmosphere: ATEX Classification

Group Category	Protection Method
IM 2	Ex e: increased security
II 2GD *	

* in the presence of explosive dust atmosphere, terminal blocks are to be installed in certified enclosure II 2D

General Information

The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance.

Protection		IP 10	NEMA 1		
Rail		DIN3-TH35			
Wire stripping length		25 mm	0.984 in		
		Screw clamp		Screw rail contact (Maximum value)	
Operating tool		Allen Key			
		6 mm	0.236 in	4 mm	0.158 in
Torque		6.5 Nm ± 0.5 Nm	57.5 lb.in ± 4.4 lb.in	2 Nm ± 0.5 Nm	17.7 lb.in ± 4.4 lb.in
Mechanical endurance of disconnect system					

Material Specifications

Insulating material		Polyamide	
IRC		600 V	
Flammability		UL94	V0
		NF F 16 101	I2F2
		Needle flame test IEC 60695-11-5	Compliant

Connecting capacity per clamp

1 Rigid conductor		16-95 mm ²		4-00 AWG
1 Flexible conductor without ferrule		16-70 mm ²		4-00 AWG
1 Flexible conductor with ferrule				
Ferrule maximum outer diameter		Ø Max.		

Multi Connecting capacity per clamp

2 Rigid conductors				
2 Flexible conductors without ferrule				
2 Flexible conductors with twin ferrule				

Don't mix **solid and flexible** conductors in the same clamp

Don't mix **solid or flexible** conductors of different sizes in the same clamp

The "Connecting capacity with ferrule" data is guaranteed with ABB crimping tool PS-3

Cross section

Rated cross section		70 mm ²		00 AWG
Maximum Cross section	Manufacturer data	70 mm ²	Manufacturer data	00 AWG
Gauge	B11 / 14 mm / 0.551 in / IEC 60947-7-1			

Electrical characteristics

Current

Rated current		IEC 60947-7-1	
	Field and factory wiring Cat.2	UL 1059	
	Factory wiring Cat.1	UL 1059	
		CSA-C-22.2 n° 158	
Rated short-time withstand current 1 s (lcw)			8400 A
Short-time withstand current	0.5 s	Manufacturer data	
	5 s	Manufacturer data	
	10 s	Manufacturer data	
	30 s	Manufacturer data	
	1 mn	Manufacturer data	
Rated short circuit withstand		CSA-C-22.2 n° 158	
Max. current (45° temperature increase) / Max. cross section (mm ²)		Manufacturer data	70 mm ²
Maximum short circuit current (1s)		Manufacturer data	8400 A

Short Circuit Current Rating (SCCR) SA UL 1059 supplement

SCCR UL 1059

With the following configurations:

Maximum voltage	
Suitable conductor wire range	
Fuse rating	
Fuse designation	
Fuse manufacturer name	
Fuse type	
Short circuit current	

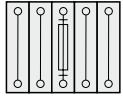
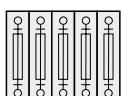
Voltage

Rated voltage	IEC 60947-1	
Rated voltage	UL 1059	
Use Group	UL 1059	C
Rated voltage	CSA-C-22.2 n° 158	
Rated voltage Ex e	IEC/EN 60079-11	
Rated impulse withstand voltage	8000 V	
Dielectric test voltage	2200 V	
Pollution degree	IEC 60947-1	3
Overvoltage category	IEC 60947-1	III

Dissipated power

Maximum dissipated power at rated current	IEC	
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Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

Overload and short-circuit protection Separate arrangement	 1 fuse and 4 feed-through blocks	
Exclusive short-circuit protection Separate arrangement		
Overload and short-circuit protection Compound arrangement	 5 fuse blocks	
Exclusive short-circuit protection Compound arrangement		

Temperature range

Ambient temperature min/max	Storage	-55 +110 °C	-67 +230 F
	Installing	-5 +40 °C	-23 +104 F
	Service	IEC 60068-2-1	-55 +110 °C
		EN 60079-7	-55 +85 °C

Current Derating curve for continuous service temperature

Environmental Characteristics

Additional climatic tests

Dry heat	IEC 60068-2-2	Compliant
Conditions	Temperature	+100 °C
	Duration of test	96 h
Cyclic damp heat	IEC 60068-2-30	Compliant
Conditions	Temperature	+55 °C
	Number of cycles	2
Cold	IEC 60068-2-1	Compliant
Conditions	Temperature	-40 °C
	Duration of test	96 h
Z/ABDM climatic sequence	IEC 60068-2-61	Compliant
Conditions	Dry heat Duration of test / Temperature	16 h +85 °C
	Cyclic damp heat Number of cycles / Temperature	1 +55 °C
	Cold Duration of test / Temperature	2 h -25 °C

Corrosion

Salt mist	IEC 60068-2-11	Compliant
Conditions	Duration of test	96 h
	Concentration	5 %
SO2	ISO 6988	Compliant
Conditions	Duration of test	48 h
	Concentration	0.2 dm ³
Sulfur dioxide	IEC 60068-2-42	
Conditions	Duration of test	
Hydrogen sulfur	IEC 60068-2-43	
Conditions	Duration of test	
Flowing mixed gas corrosion test	IEC 60068-2-60	
Conditions	Number of the test method	
	Duration of test	

Vibrations

Vibrations	IEC 60068-2-6	Compliant
Conditions	Frequency range	10-55 Hz
	Number of cycles	10
	Amplitude	
	Acceleration	10 m/s ²
Random vibrations and climatic sequence	IEC 60068-2-64	
Conditions	Duration of test	
	Frequency range	
	Acceleration	
Climatic cycles		
Step 1 -> Temperature / Duration of test		
Step 2 -> Temperature / Duration of test		
Temperature variation per minute		

ZS70-PE Terminal Block Accessories Compatibility

Description	Type	Order Code	Pack ^(ing) pieces	Weight g (1 pce)	Technical Datasheet PDF
1 End Stops	BAZH1	1SNK 900 102 R0000	20	23.90	1SNK 160 026 D0201
2 Terminal Block Markers	MC812	1SNK 160 000 R0000	22	0.09	1SNK 160 009 D0201
	UMH	1SNK 900 611 R0000	10	0.20	1SNK 160 001 D0201
	PROCAP8	1SNK 900 613 R0000	20	1.00	1SNK 160 013 D0201
	SAT8	1SNK 900 616 R0000	5	6.00	1SNK 160 013 D0201